

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A system for geometric measurement and analysis of a three-dimensional object, which is characterized in that it comprises:
 - a) a variable-phase filter having a fixed reflector and a movable reflector whose position can be changed along an optical axis;
 - b) a separating optics for guiding zero-order light to the movable reflector or the fixed reflector and higher-order diffraction light to the fixed reflector or the movable reflector, where the two kinds of light come from each point of a target object irradiated with low-coherent white light;
 - c) an interference optics system for guiding the reflected zero-order light and the reflected higher-order diffraction light to substantially a same point;
 - d) a photo-receiver for measuring a strength of the interference light; and
 - e) a position-determining and analyzing unit for determining a position of each point of the target object in a direction of the optical axis and/or for determining a composition of each point of the target object, on the basis of a change in the strength of the interference light measured by the photo-receiver, while moving the movable reflector along the optical axis.
2. (Original) The system for geometric measurement and analysis of a three-dimensional object according to claim 1, which is characterized in that an attenuation filter is provided before a component of the variable-phase filter that reflects the zero-order light.
3. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to claim 1-~~or~~2, which is characterized in that the light

cast onto the target object has an annular form and the movable reflector of the variable-phase filter correspondingly has an annular form.

4. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to claim 1 ~~or 2~~, which is characterized in that the light cast onto the target object has a spot-like form and the movable reflector of the variable-phase filter correspondingly has a spot-like form.

5. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to ~~one of claims 1-4~~ claim 1, which is characterized in that the movable reflector of the variable-phase filter uses a piezoelectric element.

6. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to ~~one of claims 1-5~~ claim 1, which is characterized in that it further comprises a means for measuring an amount of motion of the movable reflector.

7. (Original) The system for geometric measurement and analysis of a three-dimensional object according to claim 6, which is characterized in that the means for measuring the amount of motion of the movable reflector of the variable-phase filter employs interference of two rays of split light.

8. (Original) The system for geometric measurement and analysis of a three-dimensional object according to claim 6, which is characterized in that the means for measuring the amount of motion of the movable reflector uses a capacitance sensor.

9. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to ~~one of claims 1-8~~ claim 1, which is characterized in that a light source and the separating optics are located on the same side of the target object.

10. (Currently Amended) The system for geometric measurement and analysis of a three-dimensional object according to ~~one of claims 1-8~~ claim 1, which is characterized in that a light source is located in opposition to the separating optics across the target object.